

HELLER EHRMAN WHITE & MCAULIFFE LLP
Sheet 1 of 18
Title: METHOD FOR SELECTING MEDICAL AND
BIOCHEMICAL DIAGNOSTIC TESTS USING NEURAL
NETWORK-RELATED APPLICATIONS
Docket No.: 24727-801F, LaPointe, et al.
Filed: January 11, 2002

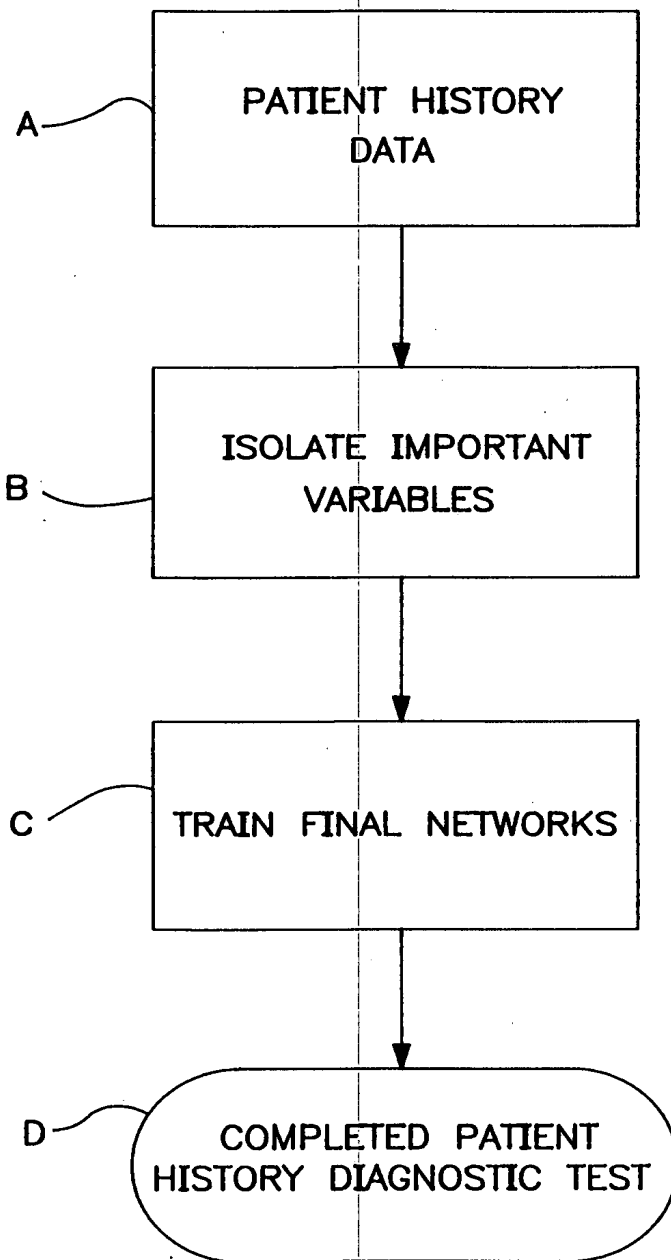


FIG. 1

FIG. 2

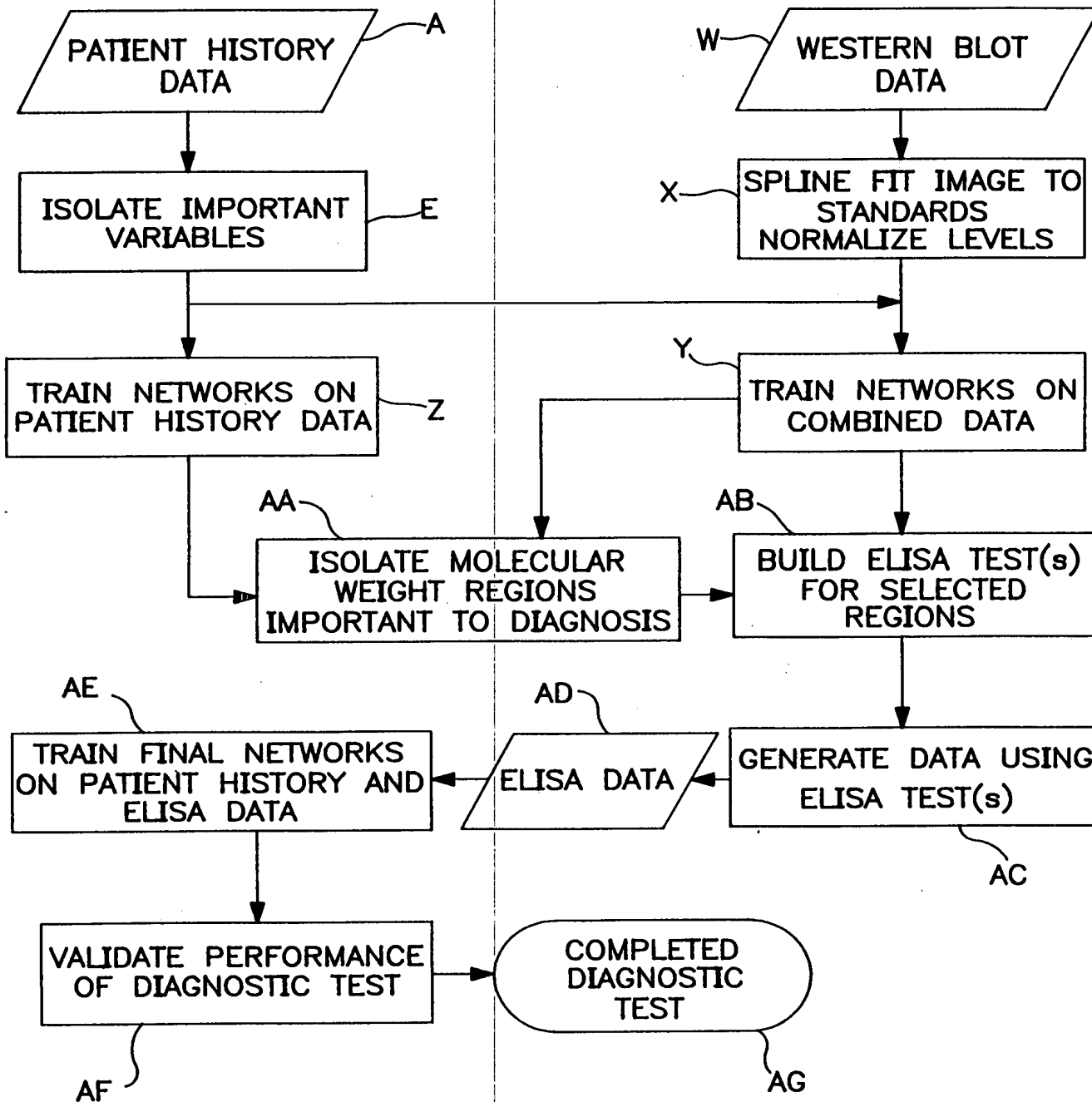
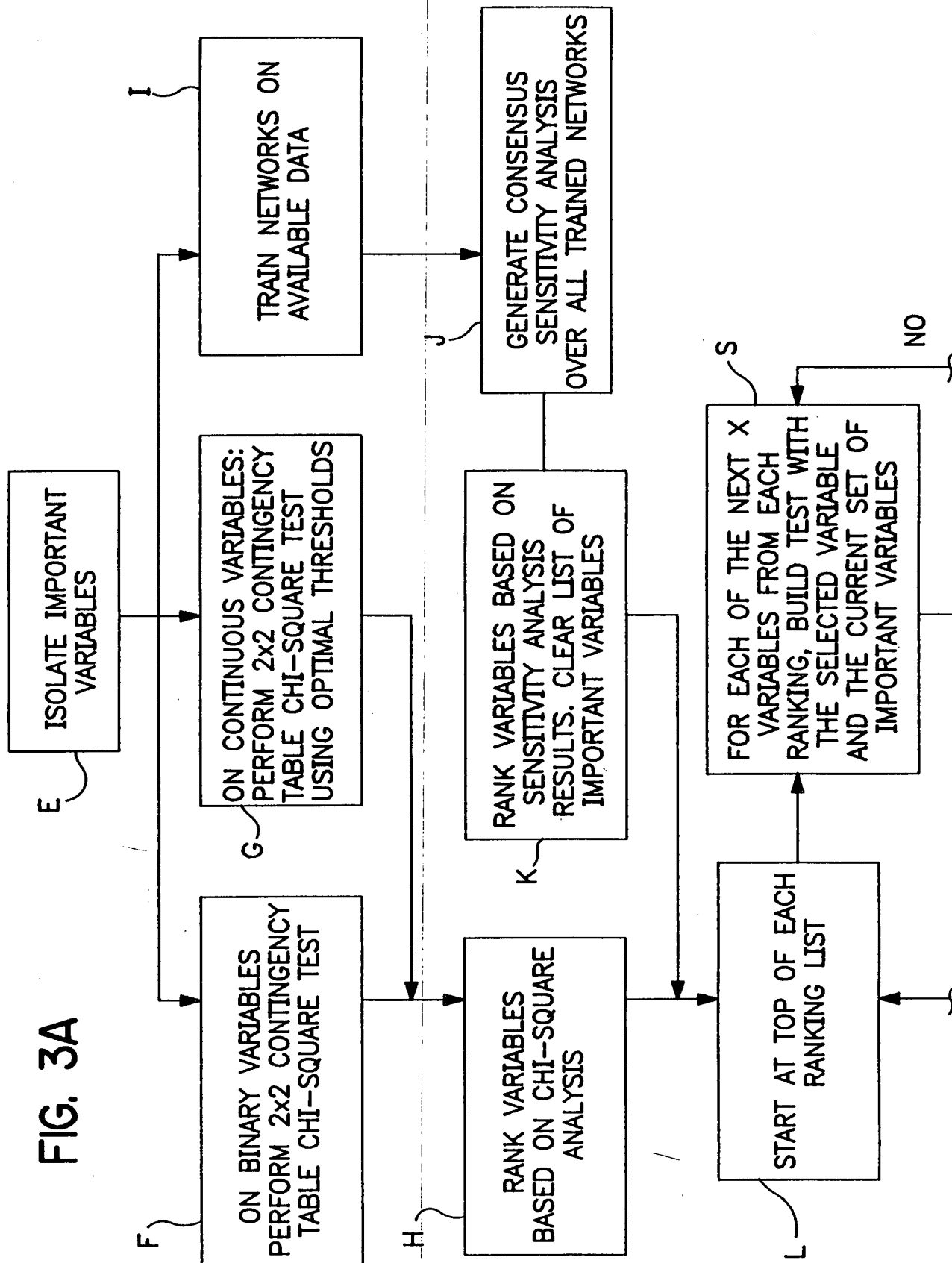


FIG. 3A



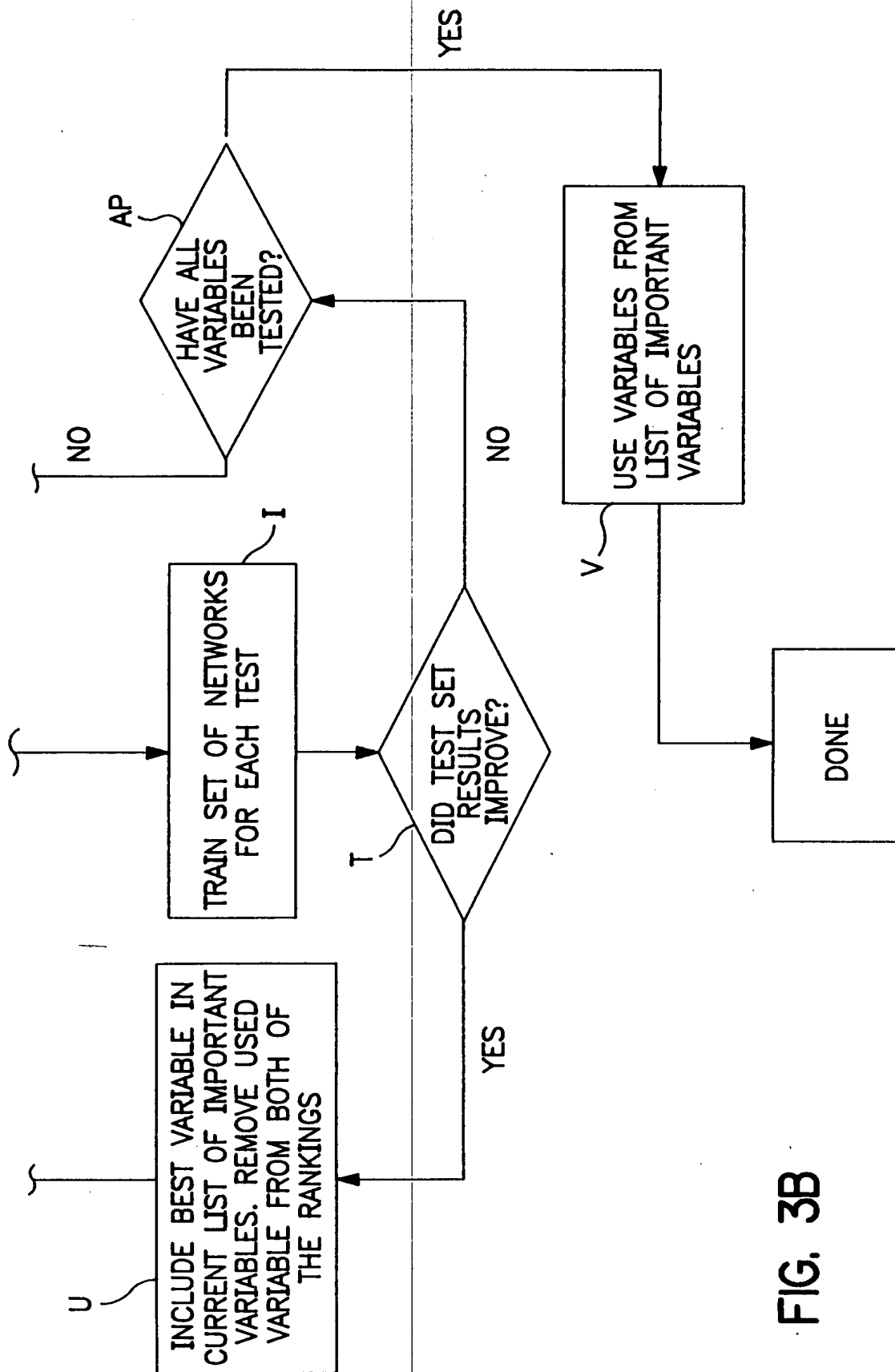
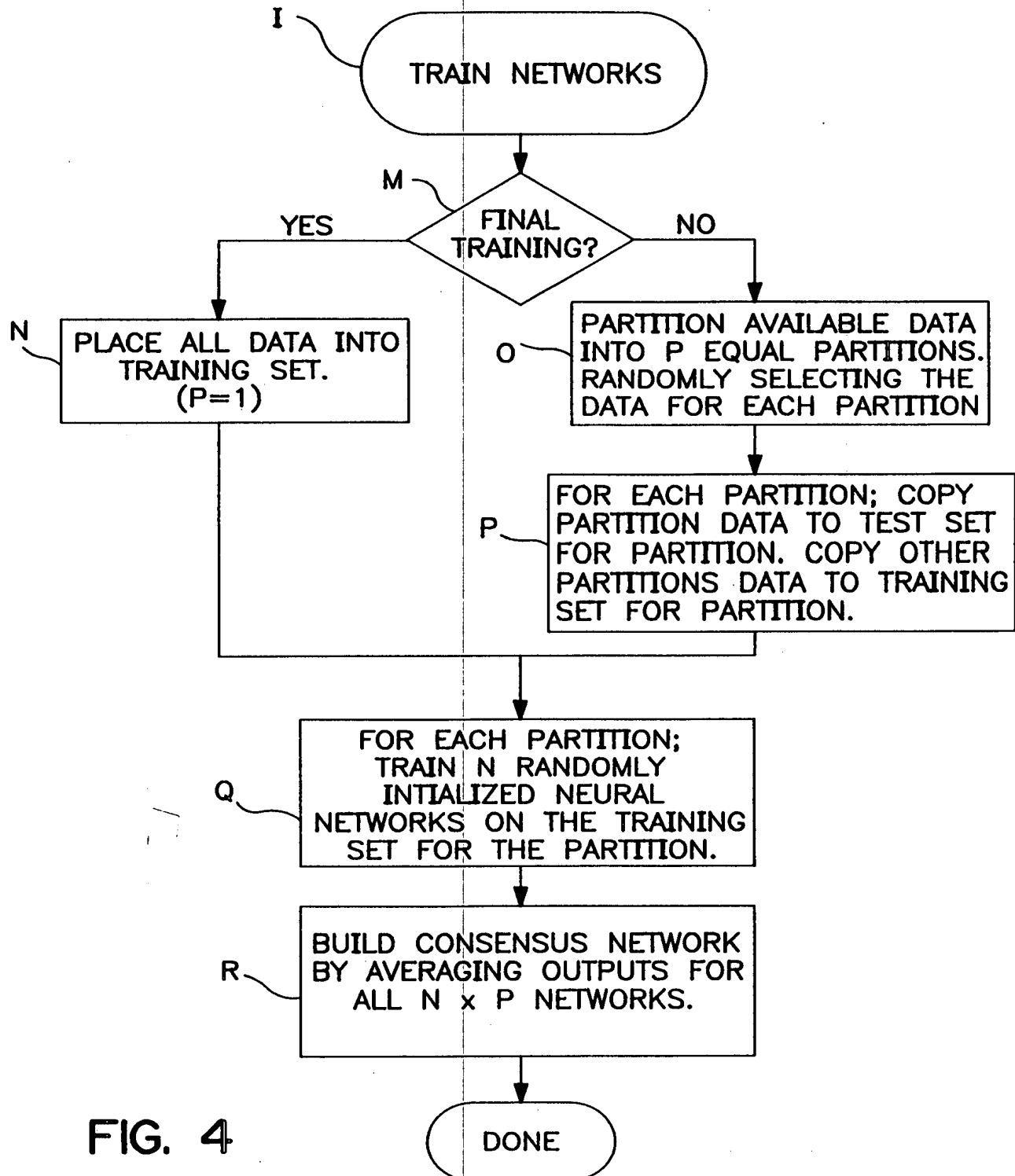


FIG. 3B

CUK 33200

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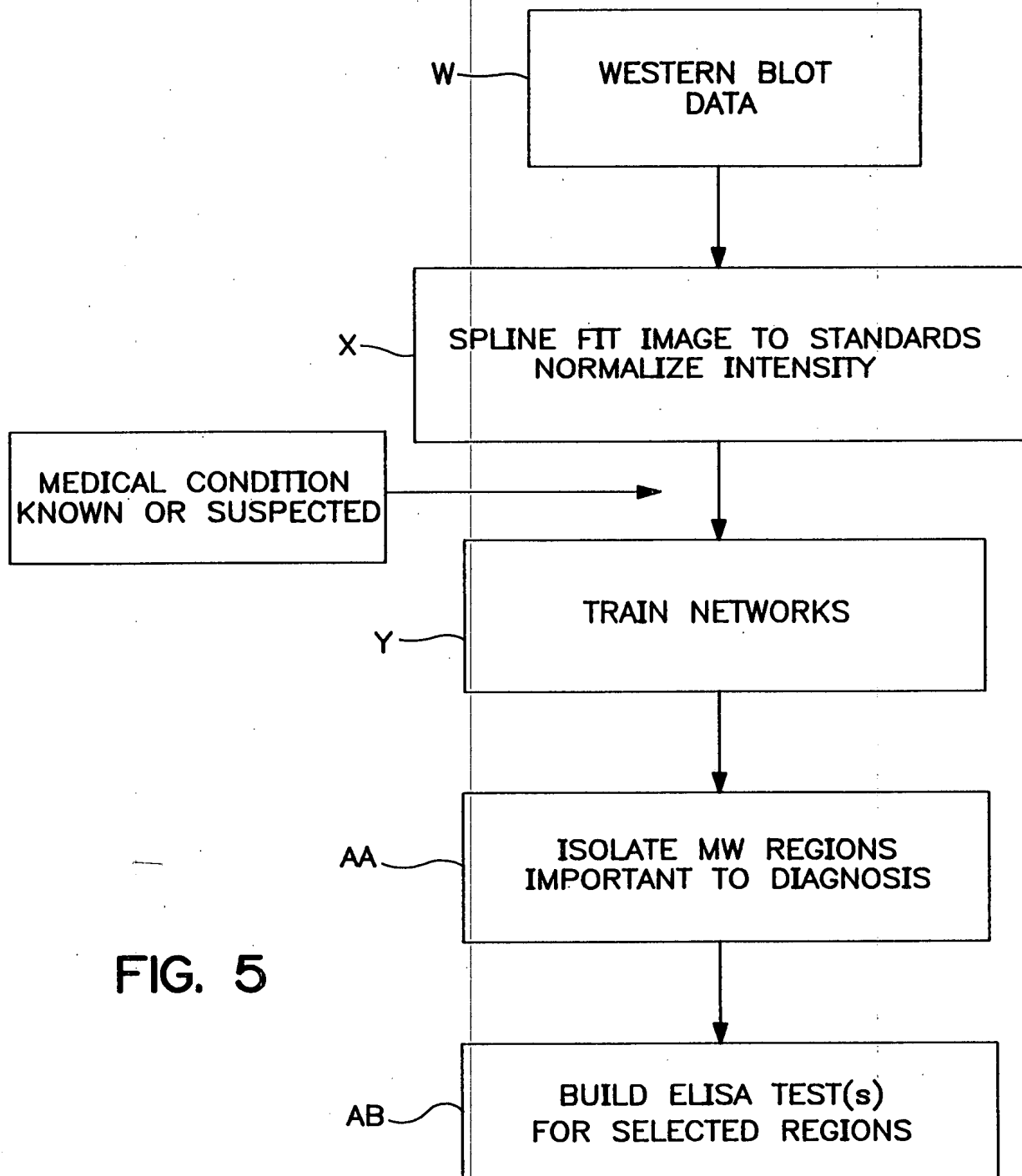


FIG. 5

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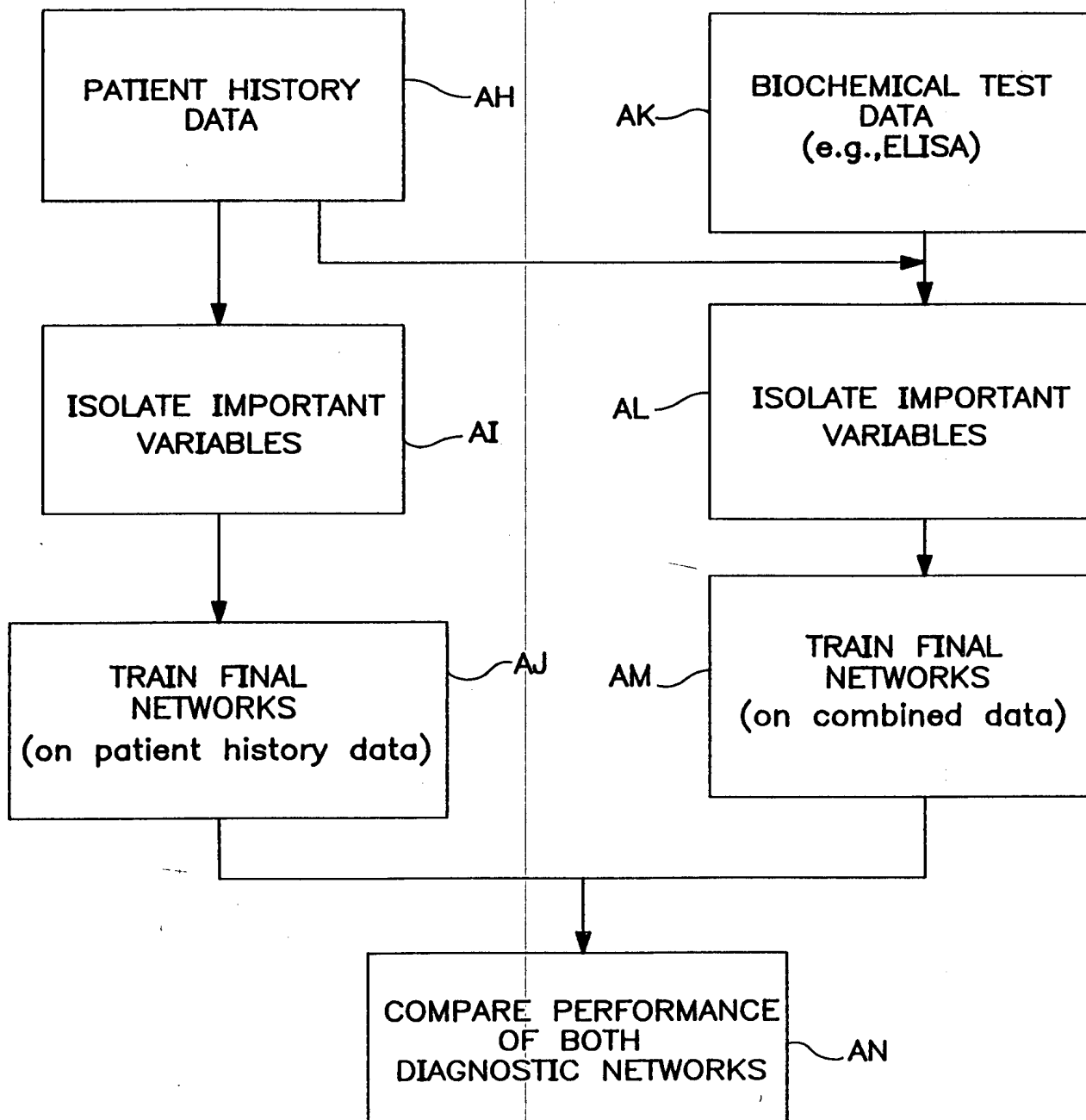


FIG. 6

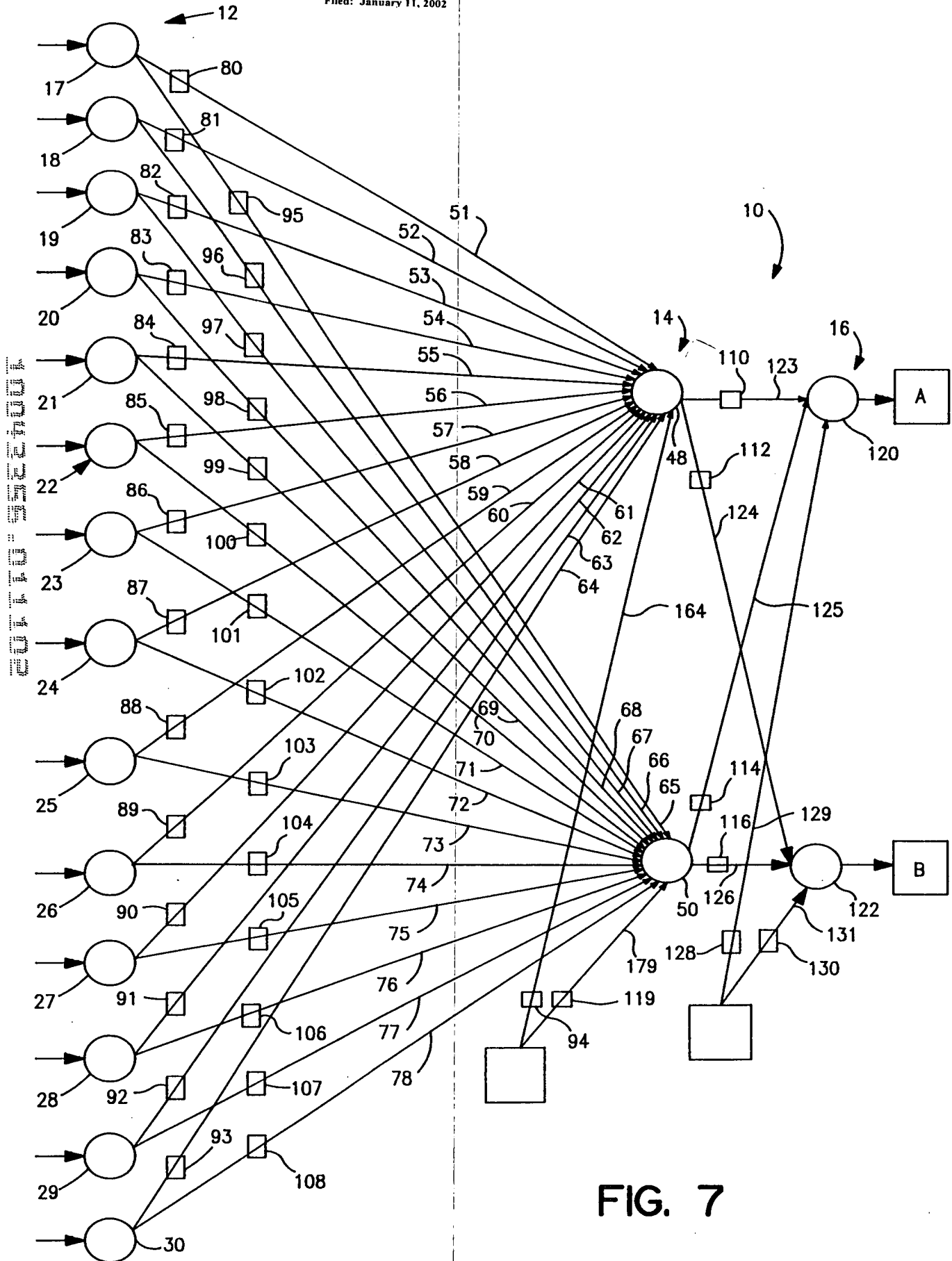


FIG. 7

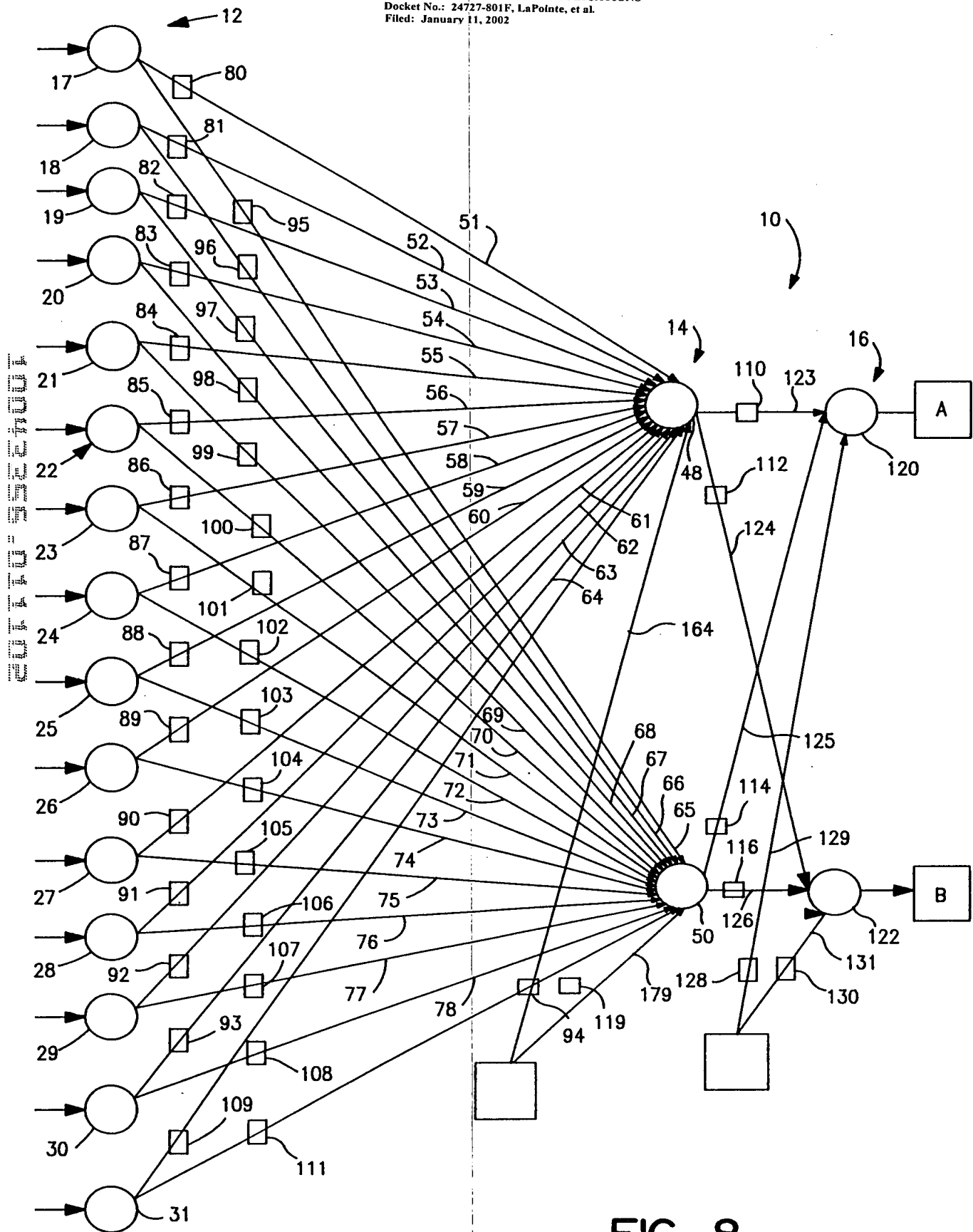


FIG. 8

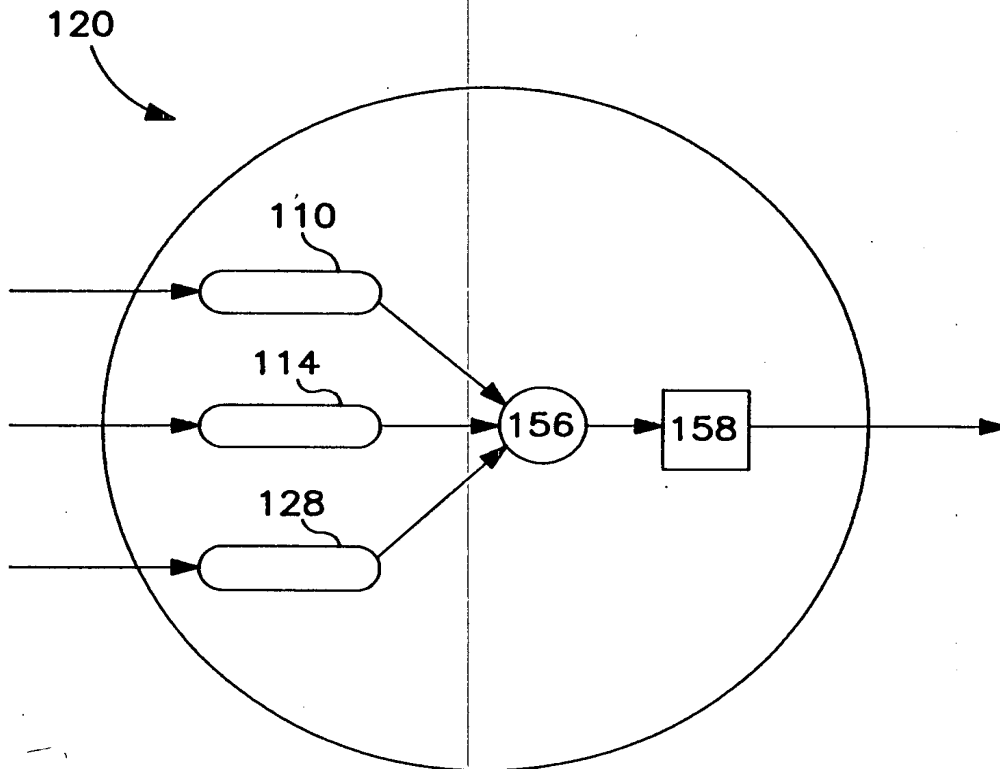


FIG. 9

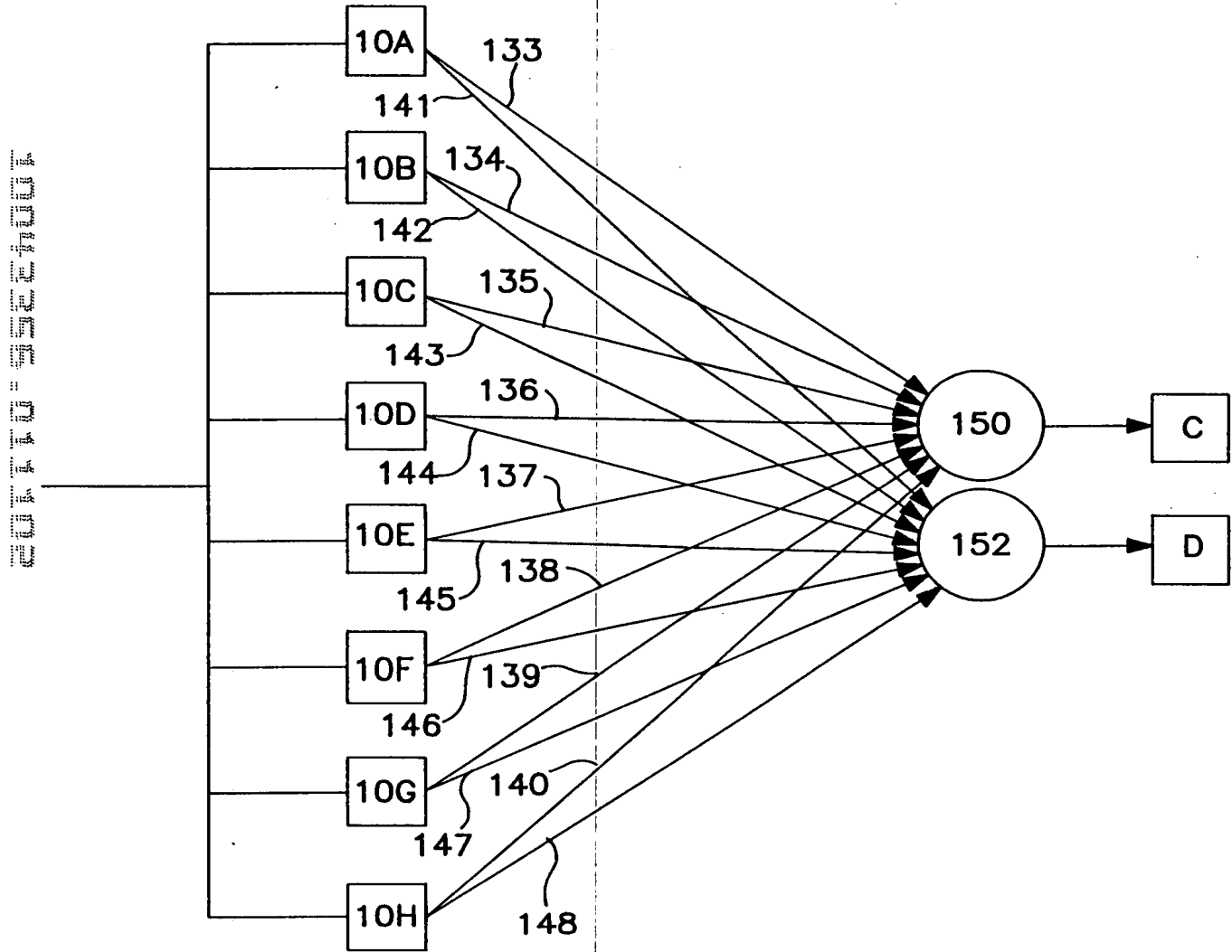


FIG. 10

☐

INPUT PARAMETERS

AGE
TEXT1
1101

NUM PREG.
TEXT5
1102

NUM BIRTHS
TEXT6
1103

NUM ABORT.
TEXT7
1104

PACKS/DAY
TEXT3
1105

ELISA TEST
TEXT9
1106

☐ 1107 PAST HIST OF ENDO

☐ 1108 DYSPMENORRHEA

☐ 1109 PREG HTN

☐ 1110 PELVIC PAIN

☐ 1111 ABNORMAL PAP/DYSPLASIA

☐ 1112 HX AT PELVIC SURGERY

☐ 1113 MEDICATION HISTORY

☐ 1114 GENITAL WARTS

☐ 1115 DIABETES

NETWORK OUTPUTS

ENDO
TEXT2
1118

NO ENDO
TEXT4
1119

SCORE
TEXT8
1120

FIG. 11

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Pre-Term Delivery Risk Assessment Software: Data Entry Screen	
Lab ID # <input type="text"/>	
PATIENT INFORMATION	
Name(last) <input type="text"/> First <input type="text"/> M <input type="checkbox"/> DOB <input type="text"/> mm/dd/yy	Ethnic origin: <input type="checkbox"/> Caucasian <input type="checkbox"/> African American <input type="checkbox"/> Asian <input type="checkbox"/> Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Other Marital status: <input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced/Seperated <input type="checkbox"/> Widowed <input type="checkbox"/> Living with partner <input type="checkbox"/> Other
PATIENT HISTORY AND CLINICAL INFORMATION	
At the time of sampling, was the patient experiencing signs and symptoms of possible preterm labor? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes, please mark all that apply.	
<input type="checkbox"/> Uterine contractions with or without pain Number/hr. <input type="checkbox"/> <1 <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input type="checkbox"/> 10-12 <input type="checkbox"/> >12 <input type="checkbox"/> Vaginal bleeding <input type="checkbox"/> Trace <input type="checkbox"/> Med. <input type="checkbox"/> Gross <input type="checkbox"/> Patient is not "feeling right"	<input type="checkbox"/> Bleeding during the second or third trimester <input type="checkbox"/> Intermittent lower abdominal pain, dull, low back pain, pelvic pressure <input type="checkbox"/> Change in vaginal discharge—amount, color, or consistency <input type="checkbox"/> Menstrual-like cramping (with or without diarrhea)
Gestational Age: EGA by first trimester sono <input type="text"/> ww.d EGA by LMP <input type="text"/> ww.d EGA at sampling <input type="text"/> ww.d	
Previous Pregnancy: Please mark all that apply: <input type="checkbox"/> Previous pregnancy: no complications <input type="checkbox"/> History of Preterm delivery If Yes, how many? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> >2 <input type="checkbox"/> History of Preterm PROM <input type="checkbox"/> History of incompetent cervix <input type="checkbox"/> History of PIH/preeclampsia <input type="checkbox"/> History of SAB prior to 20 wks.	Current Pregnancy: G: <input type="text"/> P: <input type="text"/> A: <input type="text"/> <input type="checkbox"/> Multiple Gestation <input type="checkbox"/> Twins <input type="checkbox"/> Triplets <input type="checkbox"/> Quads <input type="checkbox"/> Uterine or cervical abnormality <input type="checkbox"/> Cerclage <input type="checkbox"/> Gestational Diabetes <input type="checkbox"/> Hypertensive Disorders
Cervical Status immediately following sample collection: Dilatation(cm) <input type="checkbox"/> <1 <input type="checkbox"/> 1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 2 <input type="checkbox"/> 2-3 <input type="checkbox"/> 3 <input type="checkbox"/> >3 <input type="checkbox"/> Unk. Cervical consistency <input type="checkbox"/> Firm <input type="checkbox"/> Mod <input type="checkbox"/> Soft	
Medications at Time of Test (check all that apply) <input type="checkbox"/> Antibiotics <input type="checkbox"/> Corticosteroids <input type="checkbox"/> Tocolysis <input type="checkbox"/> Insulin <input type="checkbox"/> Antihypertensives <input type="checkbox"/> None <input type="checkbox"/> Unknown	
Qualitative fFN Elisa Test Results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative	
<div>Calculate risk</div> <div>Cancel</div>	

FIG. 13

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FIG. 14

FIG. 15

Pre-Term Delivery Risk Assesment Software:
 Test Report Form

Lab ID #	
Patient Name:	
Pre-term Delivery Risk <34.6wks:	0.288432
Pre-term delivery Risk <7 days:	0.001721
Pre-term Delivery Risk <14 days:	0.001544

FIG. 16A

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Pre-Term Delivery Risk Assessment Software: Data Entry Screen			Lab ID # ☒	
PATIENT INFORMATION				
Name(last)	First	M	Ethnic origin: <input type="checkbox"/> Caucasian <input type="checkbox"/> African American <input type="checkbox"/> Asian <input type="checkbox"/> Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Other	
DOB mm/dd/yy			Marital status: <input type="checkbox"/> Married <input type="checkbox"/> Single <input type="checkbox"/> Divorced/Seperated <input type="checkbox"/> Widowed <input type="checkbox"/> Living with partner <input type="checkbox"/> Other	
PATIENT HISTORY AND CLINICAL INFORMATION				
At the time of sampling, was the patient experiencing signs and symptoms of possible preterm labor? <input type="checkbox"/>YES <input type="checkbox"/>NO				
If yes, please mark all that apply.				
<input type="checkbox"/> Uterine contractions with or without pain Number/hr. <input type="checkbox"/> <1 <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input type="checkbox"/> 10-12 <input type="checkbox"/> >12		<input type="checkbox"/> Bleeding during the second or third trimester <input type="checkbox"/> Intermittent lower abdominal pain, dull, low backpain, pelvic pressure		
<input type="checkbox"/> Vaginal bleeding <input type="checkbox"/> Trace <input type="checkbox"/> Med. <input type="checkbox"/> Gross		<input type="checkbox"/> Change in vaginal discharge—amount, color, or consistency		
<input type="checkbox"/> Patient is not feeling right		<input type="checkbox"/> Menstrual—like cramping (with or without diarrhea)		
Gestational Age: EGA by first trimester sono ww.d EGA by LMP ww.d EGA at sampling ww.d				
Previous Pregnancy: Please mark all that apply. Current Pregnancy: G: P: A:				
<input type="checkbox"/> Previous pregnancy: no complications <input type="checkbox"/> History of Preterm delivery If Yes, how many? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> >2 <input type="checkbox"/> History of Preterm PROM <input type="checkbox"/> History of incompetent cervix <input type="checkbox"/> History of PIH/preeclampsia <input type="checkbox"/> History of SAB prior to 20 wks.		<input type="checkbox"/> Multiple Gestation <input type="checkbox"/> Twins <input type="checkbox"/> Triplets <input type="checkbox"/> Quads <input type="checkbox"/> Uterine or cervical abnormality <input type="checkbox"/> Cerclage <input type="checkbox"/> Gestational Diabetes <input type="checkbox"/> Hypertensive Disorders		
Cervical status immediately following sample collection: <input type="checkbox"/> Firm <input type="checkbox"/> Soft				
Dilatation(cm) <input type="checkbox"/> <1 <input type="checkbox"/> 1 <input type="checkbox"/> 1-2 <input type="checkbox"/> 2 <input type="checkbox"/> 2-3 <input type="checkbox"/> 3 <input type="checkbox"/> >3 <input type="checkbox"/> Unknown Cervical consistency <input type="checkbox"/> Mod <input type="checkbox"/> Soft				
Medications at Time of Test (check all that apply)				
<input type="checkbox"/> Antibiotics <input type="checkbox"/> Corticosteroids <input type="checkbox"/> Tocolytis <input type="checkbox"/> Insulin <input type="checkbox"/> Antihypertensives <input type="checkbox"/> None <input type="checkbox"/> Unknown				
Qualitative fFN Elisa Test Results: <input type="checkbox"/> Positive <input type="checkbox"/> Negative				
Pre-term Delivery Risk <34.6wks: 0.288432 Pre-term Delivery Risk <7 days: 0.001721 Pre-term Delivery Risk <14 days: 0.001544				

FIG. 16B

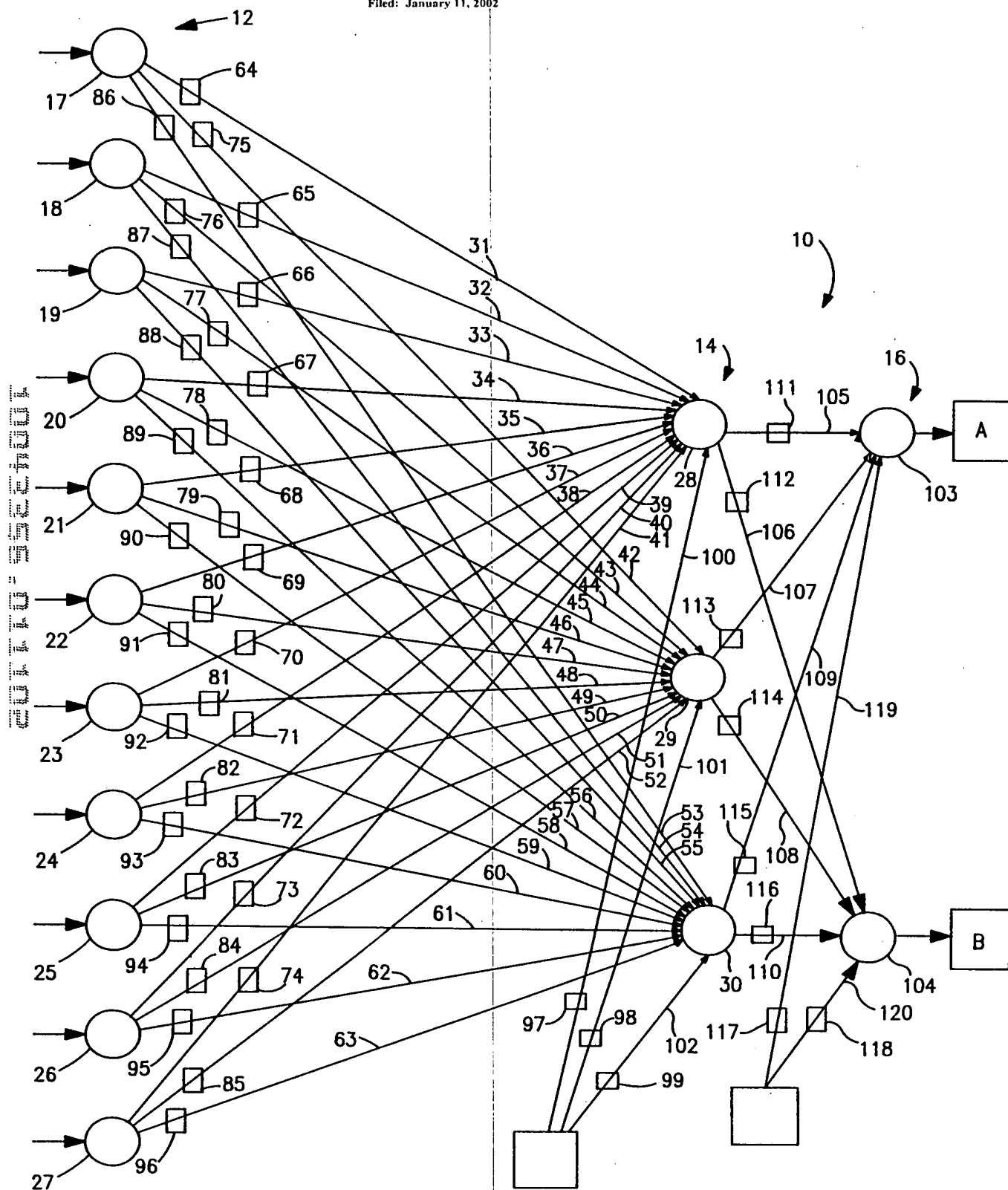


FIG. 17

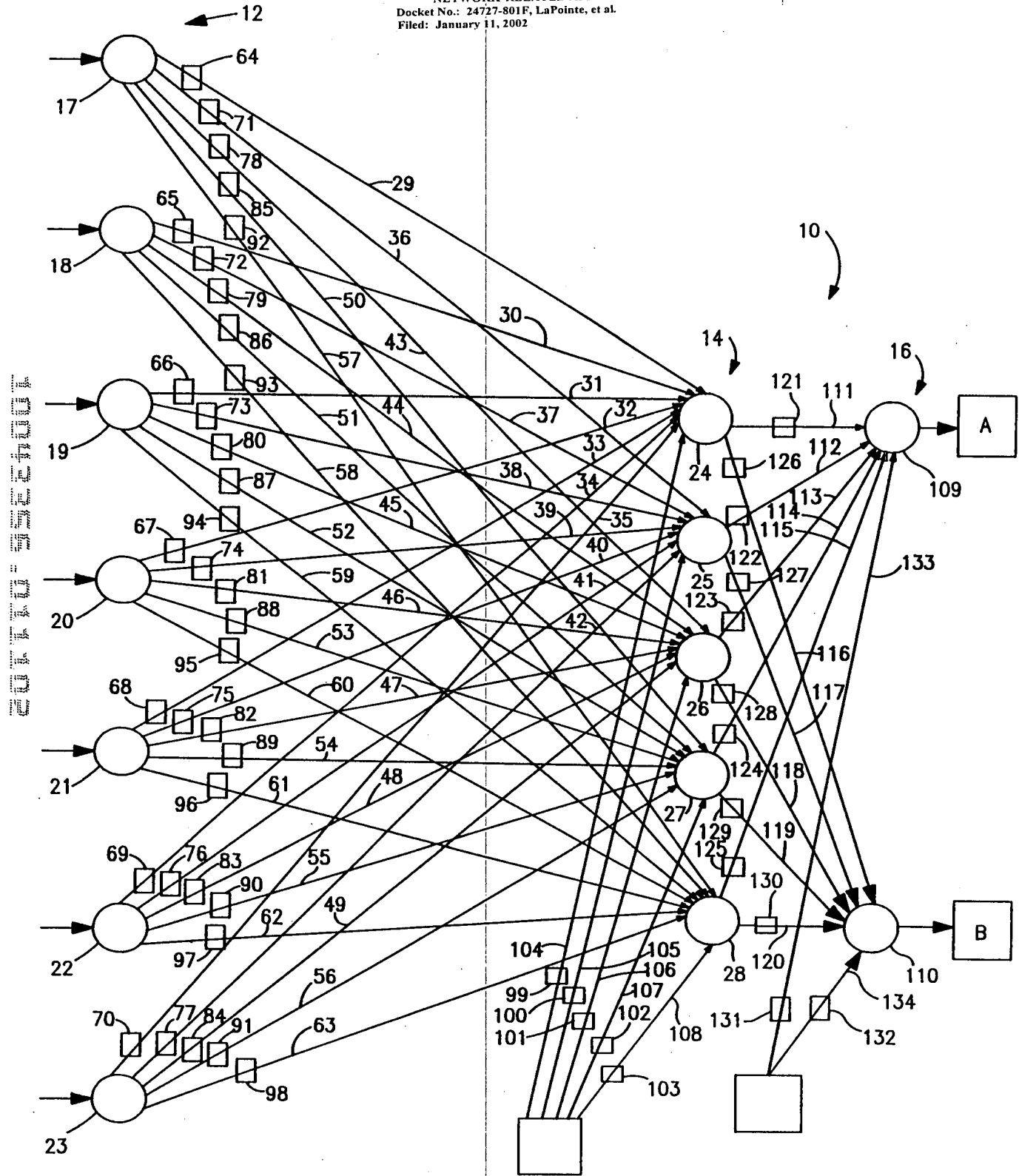


FIG. 18

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